

"Gray Ghost" Again in Action, and His Shadow Falls on Home of a Family of Great Wealth.

ELIAS MANNERING rose from his place at the head of the long table. If pride shone from his still clear and penetrating eyes, it was pardonable. For he was one of the few multimillionaires in the country into whose life no scandal had crept, upon whose named no agitator had scored. On each anniversary of the wedding of Elias and Rachel, his wife, the children and their children gathered in the great Westchester castle. On these occasions the women wore their more wonderful jewels, their newest gowns. Upon the table stood the famous gold service, presented to Elias twenty years ago by an Indian potentate whose finances he had reduced to order.

The sons and grandsons and their wives vied with each other in friendly rivalry to see which one might present to Elias and Rachel the rarest present. And on this fiftieth anniversary of the marriage of the old couple their descendants had outdone themselves. Moreover, the whole world knew of these family gatherings. Just now, before Elias rose to speak, his oldest son, Elias 3d, had read the names of the senders of more than 200 telegrams. A king and two presidents were among them. The sideboards were piled high with gifts from three continents. There must have been in this room the equivalent of not less than a million dollars in gold and precious stones.

Elias raised his glass. "I am going to give you a toast," he said. "You all know to whose health I shall ask you to drink." His smile seemed to caress the sweet, mild features of his wife. "But before I give that toast, I want you to join me in thanks. As I look over my life and see the prosperity and happiness that has come to me and mine, I feel that God has been very good to me."

"Too good," said a voice from the door.

NOT merely the words, nor their cynical connotation, caused the gasp of amazement from the men and the cries of fear from the women. It was the pistol in the hand of the speaker. He stood framed in the doorway, long and lean, thin-lipped and cruel-eyed. Even as Elias 3d, an ex-aviator and football player, kicked his chair from under him, the intruder crossed the threshold. Behind him came half a dozen men, each armed and menacing.

The butler, French and excitable, dropped a bottle of wine to the floor. Its loud explosion galvanized into activity the butler's four assistants. Weller, stocky and active, leaped at the leader; a bullet caught him full in the chest, and he went somersaulting to the floor. Johnson, older than Weller, threw a silver tray on which were coffee cups. The liquid damaged only his forehead. A shot from the corner of the bandits sent Johnson to join Weller. Elias 3d, a yard from one of the bandits, went down. His father's cry of agony was cut short by a fourth bullet.

Old Elias, his face ashen with grief, not fear, faced the intruders. "What do you want?" he cried.

"What do you think we want?" jeered the lean leader. "Everything. Your money, your jewels, your life. The French butler sprang forward, but the leader easily evaded him. The butler went sprawling upon the floor. One of the bandits bent over and his pistol muzzle crashed upon the butler's forehead. He crumpled into unconsciousness.

The leader walked to the side of old Elias. Threatening the old man with his weapon, he ordered the women present to strip off their rings and necklaces.

"I forbid you to," cried old Elias. Outraged pride made him give the order.

Calculated the leader struck the host. The old man fell across the table. The two remaining servants were shot down without compunction. And when Elias' grandsons would have continued the unequal struggle, their knives and pistols were restrained.

Within forty minutes after their arrival the bandits had departed, taking with them, in sacks the gold plate, the jewels of the women, and certain ornaments from the drawing rooms and chambers upstairs. Behind them lay two dead men, six badly wounded men, and a dozen hysterical women. All the unbound were tightly bound and gagged.

A similar situation obtained in the servants' hall. Outside in the garage and stable were men who struggled vainly at their bonds or moaned from the pain of injuries. And in the lodge at the gates of the estate lay another dead man, above whose body, in a sack, lay a battered indignantly a green and yellow parrot.

IT was half an hour before little Elias 4th wriggled free of the ropes that secured him; ten minutes more before he had released his mother; another quarter of an hour before he had cut the bonds of the great, another five minutes before the chief of police of the nearest village had been aroused from his early slumbers by frantic ringing of the telephone; another hour before he had arrived at the sane conclusion that he must ask help of the New York Detective Bureau; and nine hours after that Jerry Tryon came upon Jimmy Pelham and dragged him sleepily from bed.

"Wake up," cried Tryon.

"Go away," grumbled Pelham. "I wouldn't get up for anyone in this morning. I played bridge till three this morning."

"Not even for the Gray Ghost?" asked Tryon quietly.

Pelham's sleep-fogged eyes cleared. He leaped from the blankets, with a vigor that denied the evidence of thinning hair.

"Dickenson to get breakfast," he said as he made for the bathroom. A minute later Tryon, speaking to the former Maine guide, who was now Pelham's cook, valet and general factotum, heard Pelham splashing in the tub. The ex-leutenant of police, now owner of the Tryon Detective Agency, smiled grimly.

"Of course," agreed Pelham, when Tryon gave him the story as it appeared in the morning papers, supplemented by private advice from the detective bureau. "We knew that he'd be heard from soon. The same Gray Ghost! The same far-reaching plans, the same daring, and the same bloody disregard of human life." He puffed at an after-breakfast cigarette. "Who's murdering me?"

"ILLIMORE"



THE YELLOW PARROT, FROM ITS CAGE ABOVE, SHRIEKED OVER AND OVER IN ENDLESS REPETITION: "ILLIMORE! ILLIMORE!"

A sudden thought came to Pelham. "Any of the servants named Illimore?" Tryon pursed his lips. "How do you spell it?" Pelham blushed. "I don't know. But the lodgekeeper's parrot keeps shrieking the word over and over again, and I thought it might be a name."

Tryon chuckled. "No, there ain't an one with a name anything like that. Shall we go and examine the family?"

Which one of the servants knows all about the others?" asked Pelham. "I suppose that the housekeeper, Mrs. Barney, would know more than any one else," answered Tryon.

"Well, you send her to me and I'll talk with her. You question the family?"

Two hours later Pelham met Tryon in the library.

"What have you learned?" asked the ex-leutenant.

Pelham made a wry face. "Nothing except that every servant in the house or grounds has been here at least five years, and that all of them are exceptionally trustworthy. What have you found out?"

"Nothing beyond what we already know," replied the ex-leutenant. "Old Elias Manning is fit to be tied. He seems to expect that detectives ought to catch a guy like the Gray Ghost in ten minutes. He forgets that the Ghost has been at large for the last ten years. A fine old scout, though."

The chief of police joined them. "Any objection to the inquest taking place this afternoon, gentlemen?" he asked.

Tryon shook his head. "None at all. We'll be there."

THEY were there when the coroner examined the servants and members of the family. Tryon conveyed a hint to the coroner which caused that worthy to refrain from asking personal questions of the servants. So that the only new bit of information the two detectives acquired was to the effect that the huge touring car which supposedly had been used by the bandits had been overturned in a ditch a couple of miles from the lodge gates, and abandoned.

"And that," said Tryon to Pelham.

HE arose, leaving the coroner to continue the examination, and followed by Pelham, walked from the room. Outside, Pelham stopped at his friend's sudden change of front.

"A hunch," said Tryon.

Pelham smiled. "You just discovered that some of the servants were part of the bandit crew, eh?"

Tryon stared at his slender ally.

"How did you know that?"

Pelham laughed. "The minute I asked how long the butler had been here, you interrupted. My question put into form a suspicion that had been shapeless in your brain. And you didn't want the butler's suspicious aroused, or the suspicions of any of the other servants."

"Go on," said Tryon. "What else do you know?"

"Well, I know that the lodge keeper was murdered by some one whom he took to be a friend. The newspapers told us that the car containing the bandits was admitted by the lodge keeper."

"The papers said nothing of the sort," exclaimed Tryon.

Pelham grinned. "The papers said that the bandits arrived in an automobile and departed in one. Now, it's obvious that the lodge keeper would not have admitted a party of strangers. There is a telephone in the lodge. Before unlocking the gates to strangers, especially late at night, the keeper would have phoned the house. And quite obviously he didn't telephone, because no one, servants or family, knew that a car was coming up the drive. At least no one has mentioned knowing it."

He shot a glance of interrogation at Tryon.

"Their arrival was a surprise to every one, according to what they say," said Tryon.

"Well, then, the lodge keeper opened the gates to a friend," observed Pelham.

Tryon shook his head. "No good. The keeper was a crabbled old Scotchman; he hadn't been out of the grounds in two years. Hadn't a relative or friend on earth. His only acquaintances were the servants here."

"And we both agree that this was partly an inside job," said Pelham.

"The keeper unlocked the gates because some one whom he knew asked him to, or else."

"Then some one took the key from him," said Tryon.

Pelham smiled again. "Something like that, eh? For certainly no one could have forcibly entered his house without leaving some mark of entry. But the doors and windows were unopened. And if a stranger had climbed the wall and rung his bell, he would have telephoned the house before opening the door. So we must assume that some one whose voice he recognized summoned him to his door."

Tryon whistled. "Which one?" he asked.

"Every one of the servants can

prove, by several other servants, that he was nowhere near the lodge gates last night. That upsets our theory that one of the servants got the key from Hardy."

"I suppose it does," said Pelham, reluctantly. "But I know that the theory is right, just the same."

Tryon laughed. "Go to it, Mr. Pelham. But all work and no food is bad business. Let's eat."

They dined in the same great hall in which the tragedy had occurred the night before with members of the family, subdued and horror-stricken. And after the meal was over Pelham walked to a French window. He saw a light shining through the trees, and beckoned to Pierre, the butler. That bandaged gentleman informed him that it shone from the lodge which, in direct line across the lawn and through the trees, was less than 300 yards away.

Pelham nodded. "By the way, Pierre, you had a bottle of wine in your hands when the bandits entered. Had it just come from the cellar?"

The black eyes of the butler sparkled. "But yes, m'sieu. Why? There was an alertness in his manner and speech that betokened a quick intelligence."

"Because there is still glass upon the floor here, and the glass is dusty," replied Pelham, "as though the bottle had just come from the cellar."

"M'sieu sees everything," said the butler.

Pelham laughingly disclaimed the compliment. "Not everything, Pierre."

He stepped through the French window upon a small terrace. There he stood for a while, smoking, then walked to the swimming pool, and stared into its moonlit shallows.

Somewhat the sense of peace and security that had been in the atmosphere while the sun shone had departed. Pelham shuddered, he felt an indefinable menace. Angered at himself, he moved restlessly to one side.

THAT movement saved his life. For from the shrubs behind him some one rose and hurled at him a heavy stone. Had it landed upon Pelham's head a dead man would have been found some hours later in the pool.

IN the shadows of the great stone castle, crouched on the terrace outside the French windows of the dining room, they watched. And then, just before the false dawn was due, the French windows opened softly and through the aperture stepped the figure of a man. Even in the darkness they could see the white bandage about his head.

Across the terrace the man walked, and across the drive. Then, upon the lawn, he knelt down. They saw the hands working upon the grass.

"Wiping out footprints that would never hang any one," said Tryon with saturnine humor.

Pelham stood upright. "Pierre," he called sharply.

The kneeling figure on the lawn leaped to its feet. A flash of flame stabbed the darkness. Bent low, the two detectives raced at the butler. He fired twice again, missed, and turned his weapon against himself. The Gray Ghost's followers preferred a bullet to the electric chair.

Elias Manning, awakened from slumber by the sound of the shot, insisted on a full explanation. Pelham gave it.

Pierre had gone down to the cellar for wine. That would take several minutes, time enough for him to run three hundred yards to the lodge, gain admittance, kill Hardy, and unlock the gates. He could then have ridden almost to the house, dropped off the bandits' car, re-entered the house and worked upon the grass. The whole job need not have taken more than five or six minutes, in which time he would not be missed.

"He would be alarmed at news that we were going to examine footprints on the grounds. He would know that his were the only footprints leading to the lodge. He would not know that such faint traces as a running man might leave would be valueless as clues. Alarmed, he would try to obliterate them. You see, he was so alarmed already that he had tried to kill me. For, of course, he was the

man who tried to drown me. I was sure of that."

"Why?" asked old Elias eagerly.

"He is the only Frenchman in your employ, and Hardy's parrot kept crying: 'Illimore! Illimore!'"

"I don't get it," said Tryon.

"The parrot has been in a perfect frenzy since his master was murdered. His tiny brain retained only one thing, and that was the exclamation that the murderer, who had gained admittance on some specious plea, had uttered."

"It was the parrot's rendition of words that he had never heard before: 'Illimore! Illimore!'"

"He is dead!" Only a Frenchman would cry "He is dead!" in French.

Pierre had the opportunity to murder Hardy; Pierre was the one servant who could have said over the body of his victim words that sounded like the shriek of the parrot. But this was not evidence; if I could trick him into betraying himself that would be evidence."

"I said that I'd pay fifty thousand dollars for the capture of the men who committed the robbery," Elias Manning said. "You got one of them, the traitor in my house, and I feel that you have earned that fifty thousand."

Pelham shook his head. "I don't think so, but if you feel like writing a check, write one for a hundred thousand."

The old man's jaw dropped. "What do you mean?" he asked.

"The bandits' car overturned in their haste to get away. They could hardly have carried their loot in their hands without attracting attention. Yet, although the woods have been scoured, there's been no trace of the stolen plate or other bulky objects. Moreover, the Gray Ghost knew that it would take his men at least an hour to return to New York. In that time the alarm might be given, the car stopped and the stolen property recovered. He takes no chances. He would leave the stuff here, to be

taken away months later, perhaps, when the hue and cry had died away."

"Where?" gasped old Elias.

Pelham smiled. "While I am not a gambler man, I will wager my share of the retainer you have already paid us that the cloth-covered object that my hand touched as I was swimming under water was a sack containing your gold plate. And if the plate is there I will wager that the jewels are there too."

"I won't take the bet," said old Elias. "I'm afraid I'll lose."

HE morning—In the sacks deposited in the deepest corner of the pool—the stolen property was found.

"The crafty devil," commented Tryon, as they rode into town. He knew that at this time of year no one would go in swimming. But if Pierre had succeeded in drowning you the stuff might have been recovered as we sought for you."

Pelham laughed.

"That cunning second would have found my body himself and brought me ashore before the pool could have been dragged."

"I wish that we'd caught him alive," grumbled Tryon. "He might have been persuaded to talk."

"Think so? A man who will serve as a butler five years in order to lay plans for a robbery, who will willingly suffer a wound in order that his part may not be suspected, who will kill himself rather than be captured, is hardly the sort to turn state's evidence. What a man, what a man!"

"The Gray Ghost," said Pelham. "To be able to inspire such devoted service—I'll feel safer when he is behind the bars."

"We'll put him there yet," snarled Tryon.

"Maybe," said Pelham thoughtfully. "If he doesn't kill us first."

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Artificial Earthquake To Use Up Explosives

SCIENTISTS, with the co-operation of the United States official army, are going to set off something like twenty tons of surplus war explosives about a half mile underground in an abandoned mine, to make an earthquake, so that they can study the effects.

There is one of many ways in which the vast store of surplus explosives is being used for the benefit of the public in agricultural and reclamation work, and in scientific experimentation.

After the war the tremendous amount of surplus explosives which Uncle Sam found on his hands became a cause of worry, so much so that shiploads were taken out to sea and thrown overboard.

Dr. Charles E. Munroe, chief of the explosives section of the National Research Council, and explosives expert for the bureau of mines, has been chief adviser of the government in the recent private gathering of government scientists at the American Geophysical Union, here in Washington. It promptly won the enthusiastic support of the leading scientists. Dr. Arthur L. Day, director of the geophysical laboratory; Rev. Francis A. Tondert, chief of the Georgetown University seismological observatory, and Col. C. G. Storm, representing the ordnance bureau of the War Department, are among those co-operating in the experiment.

The only notable previous artificial explosion which scientists had an opportunity to study was a simulated earthquake was when Gen. H. L. Abbott on October 10, 1885, blew up Flood Rock, Hell Gate, by an artificial explosion of 240,399 pounds of rock-a-rock and 68,537 pounds of dynamite, No. 1. Gen. Abbott took advantage of that opportunity to measure the rate of transmission of the tremors started by the explosion. He got a record of four miles a second as the highest rate of speed. But he had only very crude instruments.

The proposed experiment with surplus war explosives in an abandoned mine differs very materially from this Hell Gate study two score years ago, because that was near the surface, while the plan now is to go as far underground as possible and to get more accurate results with mechanically recording instruments, specially built.

While the study that the scientists will make is extremely technical and the problems involved are intricate, yet the public can get some idea of what is sought.

One question is with regard to what is known as "the zone of silence." When an explosion occurs, as for example during a battle, there will be some places where it will be heard and then the "zone of silence" will intervene. The zone of silence will be an area where it is audible. The scientists do not know much about that "zone of silence" and want an opportunity to study it.

The great majority of earthquakes—at least 95 per cent—are caused by a slipping at a crack in the earth. This crack is known geologically as a "fault," and an illustration is the one that cuts through San Francisco, known as the "San Andreas fault." Sometimes the sides of such a crack slip up or down, or again they may slip horizontally, as occurred at San Francisco. Some times there are both motions.

That explosion takes place over a long slip, sometimes a mile, or maybe twenty miles. So there is no one definite point of the earthquake.

In studying an earthquake one of the most important questions which the scientists concern themselves with relates to the waves sent out by the shock.

There are three principal kinds of waves. Draw a circle to represent the circumference of the earth. Mark one point "P," to represent the focus of the earthquake, and mark a couple of points "S" and "W," to represent stations where it is observed or recorded. The three chief waves are: First, those that go through the earth, and these are of two kinds; one a longitudinal vibration in the direction of the motion, as in an organ pipe, and this arrives at the station first; then, along the same path comes the transverse wave, which vibrates up and down at right angles to the general direction, as when one snaps a string, and this reaches the station second. The third kind of wave travels along the surface of the earth, like the waves which travel along the surface of a pond, and they get to the station third. Still other waves start in the opposite direction from the focus and travel all around the earth. They reach the observation station last of all.

The scientists have only very rough estimates of the velocity of these waves. In the first place, it is very difficult to determine the exact time at which an earthquake starts, so the scientists have been able to figure the velocity only approximately. Then, too, the quake takes place over a long slip—maybe one mile, maybe twenty miles—and there is a succession of shocks and not at any one fixed point.

When an earthquake is recorded in a seismological laboratory the record is mechanically made along a horizontal line. First a tremor or slight waviness of the line is noted, which is the preliminary or longitudinal wave; second, the line begins to look like the teeth on a saw, which is the secondary or transverse wave; and third, the line makes sharp jumps up and down, which are the main waves along the surface of the earth. These last do the most damage. The seismograph shows these waves with a parallel mechanical time record. By measuring the time of the different waves and knowing the velocity, approximately the scientists calculate how far off the earthquake is from the observation station.

There are many other complications which the scientists hope to study effectively when the artificial earthquake is set off in an abandoned mine. They figure that if instead of having the shock produced by a slip along a long "fault," they have the shock start at a definite time and from a definite point, the velocity could be calculated very accurately.

The plan of operation is to take, say, twenty tons of explosive, or more if it can be had; put it in an old abandoned mine, and set it up so as to start the explosion at a definite time, its being dissipated, as it might go wandering off through subterranean galleries, and then produce the explosion by electricity at a definite time. It is the intention of the scientists to have a series of twenty or thirty seismographs set up at different distances, each with good clocks, so as to get the velocities very accurately.

The mine where this artificial earthquake is to be set off has not yet been selected. It will probably be in the Lake Superior region, or in the Butte mining district of Montana, or perhaps in California.

One thing the scientists and government officials emphasize is that this explosion isn't going to do a lot of damage, and tear up the earth, as many timorous persons will at once conceive. They are already receiving freak letters from cranks, some in protest, as witness this anonymous communication, written in lead pencil on a post card, postmarked "Monroe, N. Y.," which has been received by Dr. Washington.

"Sir: You say you are to demolish this living planet. What has this God done to you that you wish to chastise this planet with dynamite? To Passion play a stage earthquake? Do you know this planet is the living God, that our fathers, the great giants, died for, and our wall died for. Irrigate, not dynamite. You are treason and murder, and ought to be arrested."